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ENGINEERING SOCIETY
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The Engineering Society Handbooklet 1979-80

Edited by Peter Noble

ASSISTANT EDITORS;
Eric Hartwell,
Sue Samuels
Steve Roberts,
John van Lierde

This has to be yet one other SKULE Production

THE DEAN'S WELCOME

It is a time of beginnings. You are entering what must seem to be a long four years of undergraduate engineering studies. I am starting a seven-year appointment as dean of the faculty. It is an appropriate time for us to look at our career objectives and plan to develop the necessary experience and knowledge to achieve them.

We are living in a time of considerable polarization in our society: antagonist versus protagonist, developer against conservationist, labour against management, free enterprise versus government control. The public is subjected to conflicting opinions on technical matters from specialist individuals and pressure groups. The result is often confusion, disillusion and cynicism. Our society is also coming painfully to a realization of the limits of raw materials available to us and to future generations.

In this situation, the professional engineer has a contribution to make which is greater, and probably more difficult, than ever before.

A basic role of the engineer is to design devices and systems to meet societies' needs. In the process of design, we rarely have the luxury of a simple, clear objective. Normally, many factors or pressures must be considered and brought together to approach an optimal combination, judged by the value system which is current in our time. To succeed, the engineer must understand and practice well the arts of constructive compromise. In a world where extreme and biased views abound, the engineers must weigh all factors and balance them carefully in arriving at a design, be it for a transistor or a transportation system. Possibly more than any other group in society, the professional engineer is equipped by his education and experience to reach effective and acceptable solutions to many of societies' problems.

But, while this possibility exists, it will come to be only to the extent that engineers can gain and hold the confidence of the individuals and groups who make up that society. Our knowledge must be factual, reliable and as up to date as feasible. It must often extend beyond technical matters to include economic, social, political and psychological areas. In addition, the engineer who is to gain public confidence must be a good listener, sensitive to the desires and fears of those who feel threatened by technology.

Your curriculum is intended not only to provide you with a basic framework of technical knowledge but also to inculcate those habits of reasoning and organization which are fundamental to the practice of engineering. Mastering the formal requirements of this curriculum will require you to organize your use of time, that irreplaceable commodity, most efficiently. Also, as a student at the University of Toronto, you

have joined one of the great intellectual communities of the North American continent. Your breadth and depth of understanding of the world of your generation will be increased as you involve yourself in the many extracurricular opportunities which the community offers. Eventually, these involvements will contribute significantly to your effectiveness as an engineer.

In the large community of the Faculty of Applied Science and Engineering it is possible for you, if you so choose, to be unknown and annonymous. Our student-staff ratio is, however, about the same as at smaller engineering schools. The doors of most professors are readily openable. The difference in our large community is that we on the staff depend more on you to take the initiative in approaching us with your problems, your enthusiasms and your doubts. The exercise and development of that initiative is an important feature of becoming a good engineer and we hope that it is a distinguishing feature of our faculty.

The challenges ahead of you are great, but so also are the rewards of satisfaction and accomplishment. You will occasionally have doubts, but so also do professors — and particularly deans. I welcome you to the Faculty and wish you success in this new phase of your careers.

Gordon R. Slemon,
Dean.

PRESIDENT'S PROSE

Fellow Engineering Student,

The faculty of Engineering at the University of Toronto is world renowned for the excellence of it's courses, it's graduates and it's Engineering Society. Your society is one of the largest and the oldest societies in Canada. We offer you everything. The BNAD, the Toike, sports, OKTOBERFEST and the Cannonball, to mention a few. All of these things have ONE AIM, to provide you with the activities and services you need to survive the next four years here, while maintaining you're sanity.

During your four years one half of your education will be in the form of lectures, labs, tutorials and exams. This is the formal part of your education.

The other half is participation in social activities, in sports, and in the organization of SKULE activities. This is the part of your education that will teach you how to work with and get along with people. As a Professional Engineer you will need this knowledge in addition to your technical background.

The Engineers at this University are known for studying hard and playing hard. It's what makes us unique on the campus.

Good Luck, have fun, and participate.

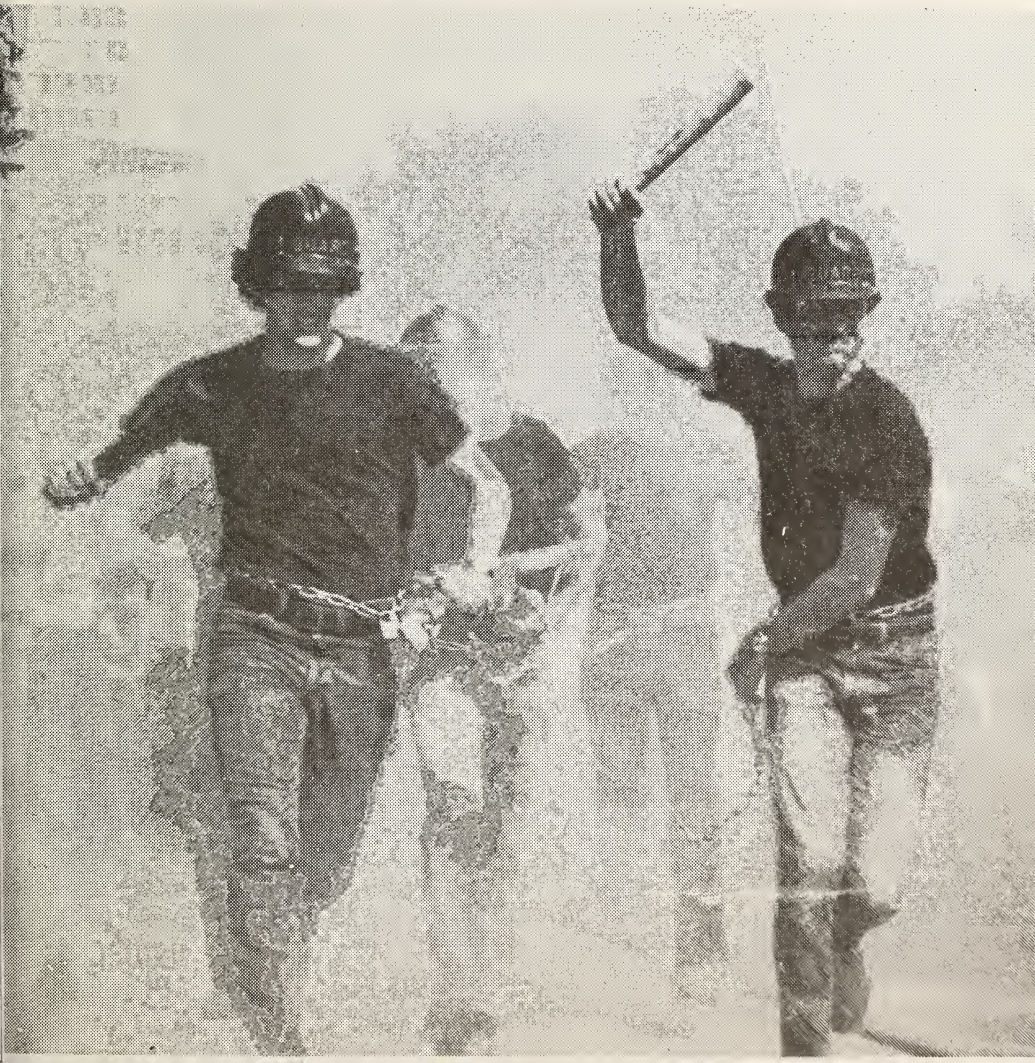
Gary Jones
Engineering Society
President 8TO

Once again, the Engineering Society has outdone itself by arranging a most gruelling schedule of events. The following is a list of the activities where Skulemen will be able to release their pent-up frustrations and tensions in the coming Skule year.

F!ROSH ORIENTATION

PROTEST DAY: (Formerly called Orientation Day)
TUESDAY SEPTEMBER 4th

Starting this year, the first day of orientation has been officially renamed PROTEST DAY. As engineers we must stand up for our lawful right to PROTEST. After PROTESTING about SAC and GODIVA and BILLY DAVIS, and the AMERICAN EMBASSY, we will wrap up the day PROTESTING about the FREE BEER at D.J.'s.

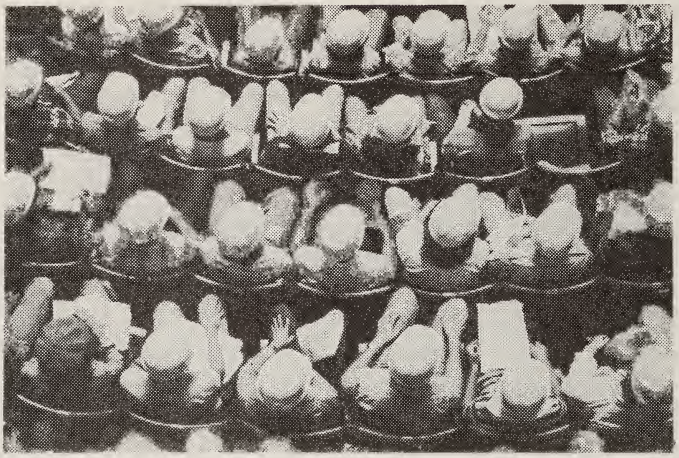


VISITING NIGHT: (Formerly called Raids Night).
THURSDAY SEPTEMBER 6th

VISITING NIGHT has always held many surprises; this year, however, WE intend to do the surprising. With a well organized attack, we will once again search the CAMPUS until we find the NURSE'S SLEEPOVER!

SCAVENGER HUNT & PICNIC.
SATURDAY SEPTEMBER 8th

As prospective engineers, you will soon realize that the best way to determine how something works is by ripping it apart and putting it back together again. Due to time restrictions, however, we will only be able to dismantle the campus this year. Following this strenuous activity will be some food and relaxation.



ROAM—AROUND
FRIDAY SEPTEMBER 7th.

The second annual Raunch-Around is a campus-wide dance with about eight locations. One ticket (free inside F! kit) gets you into all places. The Engineers will be starting at the TRINITY BUTTERY (Be prepared for the HARD HAT BEAUTY CONTEST).

HART HOUSE FARM
SUNDAY SEPTEMBER 9th

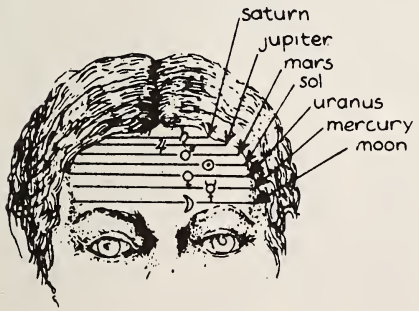
In keeping with tradition our trip to Hart House Farm is the best chance for the F!rost and the Upperclassmen to get together. After a little work, a little lunch, and lots of beer, the F!rosh challenge the Upperclassmen to various "SPORTING EVENTS". Usually the ENG. SOC. PRESIDENT and the VERY WET POND get together because the F!rosh outnumber the Upperclassmen by about 10:1. See you there!

A Few Words About...

A few words about some of the things you may be wondering about are now in order.

One of your largest expenses in the next few weeks is for **BOOKS AND EQUIPMENT**. One of the best bits of advice we can give is: "Don't rush out and buy all your books the first week." Find out first if your prof is going to assign problems from it or refer to it in the lectures. Some texts, in the past, have languished unused on shelves. Sometimes alternate texts are far superior. Others are referred to quite a bit and will prove helpful. Also, make use of the Schaum's Outlines which cost much less than the text and are often much more valuable for the problem oriented course.

When you do come to buy your books, you will find them all at the Engineering Stores at the lowest possible prices. You will also find a good selection of calculators at the Stores. A good calculator is essential, but prices are still dropping so beware of committing yourself to an expensive investment in rapidly outdated technology.



Another thing we'd like to expound upon here is **THE CARE AND FEEDING OF PROFS.** Despite what you may think, they do, to a man, know more about the subject than you do. Profs have no vested interest in destroying any of you. They are, however, human and subject to some very human hangups.

One problem they have is that, with no training in teaching, they often have trouble in establishing communication. Many tiny hassles develop into major confrontations simply because no student would go to the prof's office and explain that

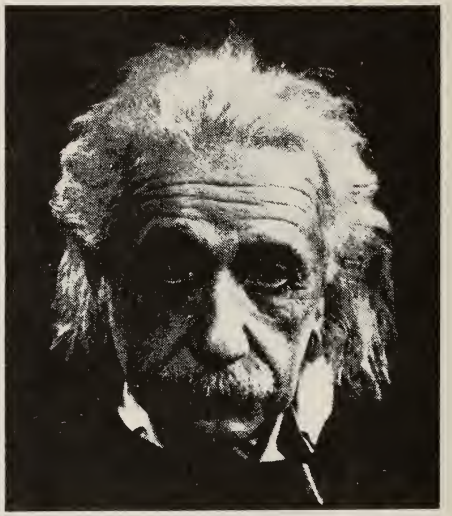
the method of handling a problem set was unworkable or that his writing on the board was unreadable from the back of the second row. The best way to avoid even these efforts is to take part in the staff-student smokers and get to know the staff and other students.

There may, however, be some situations which no amount of friendly communication will heal. When this happens, run, don't walk to the Faculty Office and ask to see W. A. Miller, the Chairman of First Year Studies. He not only has the power to effect change and wants to help, but he is one of the friendliest people you'll meet at the university.

Two subjects freshman Engineers are always curious about are **RESIDENCES AND COLLEGES.** Taking them in turn, if you are not already in a residence, chances are slim that you will change this year. However a very large number of students find it advantageous to live away from home sometime during their university career. What it lacks financially compared to living at home, it certainly makes up for in independence. If you're from out of town, of course, you are living somewhere away from home.

However, there are many types of residences to choose from, ranging all the way from a rented room through to university residence to co-op. No one type is best for everyone, so try to visit and talk with people in all kinds to find out what kind of home you should be committed to.

Living on campus, and particularly in one of the college residences, can add a lot to your social life. Watch out, however, and leave yourself **some** time for study and other trivial things. Even if you don't live in at one of the colleges you can still join one for a few measley dollars. If you think you'll need the college library or mind paying a little extra for the few college dances or have high enough marks (80-85 and up) to warrant a scholarship there, then joining a college is for you. Otherwise, don't waste your money.



The biggest problem facing you, of course, is four years of **WORK**. The best thing we can say to you is: don't get behind in your work. Having said that, we admit (once we stopped laughing) that everyone does get behind sooner or later and must catch up. This is possible, barely.

Do go to your professor with your problem, but try to define ahead of time specific questions. Really, in most of your work, organization is half the battle.

The staff tells us that the 'average student' will work an 'average' of 48 to 50 hours per week including classes. Be prepared to devote this time but remember that nobody's average and try to set some sensible priorities for yourself. No student ever does everything he is supposed

to dobut if you organize yourself in order to have specific committments of time to schoolwork and outside activities then you can retain both your marks and your sanity.

The things that will loom largest in your life in the next four years are tearful experiences known as **PROBLEM SETS.** Most of the work you'll do here, outside of note taking, studying and the occasional experiment, will involve solving a specific number of problems to be handed in at a set time and marked.

The importance of these marks varies wildly byt generally the problem sets are teaching tools, not examinations. If you do nothing else while you are here, do the problem sets — you'll probably pass with ease. If you haven't got them done on time, tell the demonstrator or prof, and ask for an extension — then at least he won't be angry with you (too much).

Even though problem sets are often your only method of self-assesment, virtually everone has copied part of one (or worked in a group on a supposedly independent effort) at some time or another. Let us caution you, however, about falling into the habit of copying whole sets on many occasions. When the exams (which count a lot more) come, you are doomed! And you don't fool anybody during the term, either.

We hear that in high school they still like the students to show up for most classes. At university your time is at a premium, so use it wisely. Some lectures are plainly a waste of time, so feel free to skip them. However, that seemingly irrelevant material covered during those boring lectures may not seem so useless during, say, the last weeks before Christmas or the period around the end of April, or, for that matter, around mid-summer when you do get your results. Some profs have a habit of leaving half of the course material to the last few weeks, then basing the exam almost entirely on it, so beware.

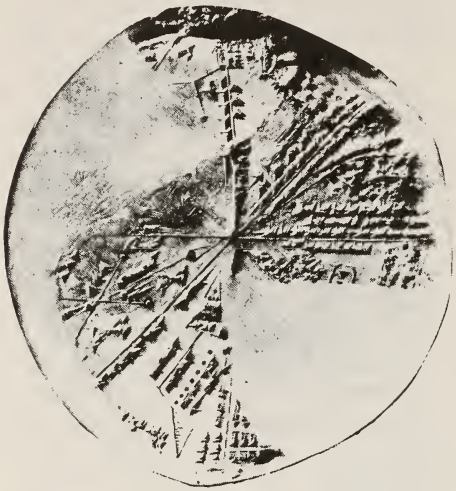
Speaking of Christmas, and Study Week for that matter, plan on getting nothing done during this time because that's exactly what will happen anyway.

We hope that you are in the mood to be depressed because we now have to talk about **EXAMS**. It is certainly not in our capability to tell you how to achieve good marks on these disasters. Rather, we will impart to you a few tips concerning the fighting of this devestating holding action.

Firstly, they are virtually all made up of problems, not essays. This means it is really possible to get zero or some other incredibly terrible mark. Mostly you will leave an exam convinced that the proper course of action for you is to transfer to a basket weaving course at some community college.

But be of good cheer. What really counts is the mystical magical **Bell Curve**. Nearly all profs believe that the mark distribution should follow a

normal (gaussian) curve, with the average somewhere around 65-70%. The marks are usually "adjusted" to fit, so what really matters is



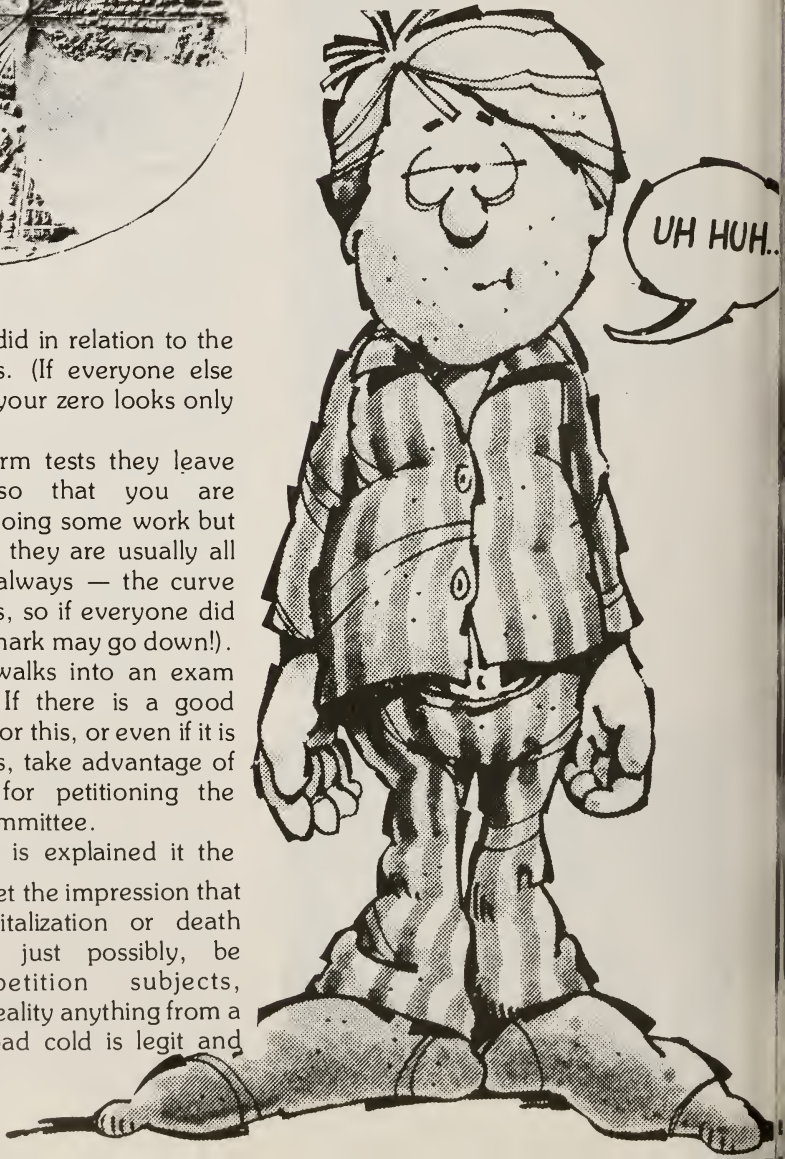
how badly you did in relation to the rest of the class. (If everyone else failed too, then your zero looks only half as bad).

Usually on term tests they leave these marks so that you are frightened into doing some work but on a final exam they are usually all raised (but not always — the curve works both ways, so if everyone did really well your mark may go down!).

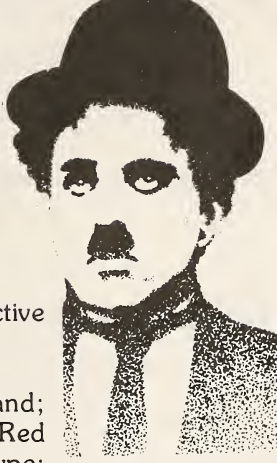
One usually walks into an exam feeling terrible. If there is a good medical excuse for this, or even if it is just exam nerves, take advantage of the provisions for petitioning the Examination Committee.

The way this is explained it the calendar, you get the impression that extensive hospitalization or death (yours) might, just possibly, be acceptable petition subjects, sometimes. In reality anything from a bad trip to a bad cold is legit and worth the short walk over to the Health Service. It costs nothing and may be worth quite a few marks. Do your petitioning at once, however, since they somehow suspect petitions which arrive simultaneously with the receipt of the final marks.

Other than that all we can say is good luck and if you find the secret of success phone us at 978-2916 and we'll take it off your hands at a reasonable rate.



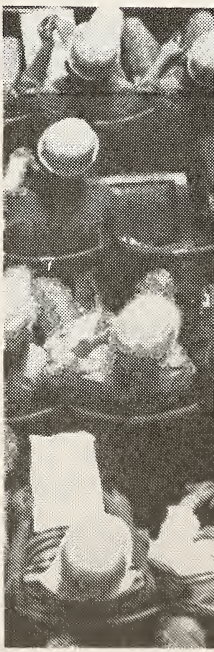
HARDHATS



Genus: Headgear, Industrial, Protective (Latin: Yarmulkus Plasticus)
Habitat: On top of all proud Skulemen
Species: White = Da Fuhrer Command; Royal Blue = Brute Force Committe; Red = Cannon; Green = Toike type; Black = incompetent Chemical; Gold = five year course; Pink = artsy; Yellow = Common proletariat
Decoration: A pure, virginal, undecorated hard hat is the sign of a F!rosh destined to flunk out and become a workee, or worse.
Helpful hints: You **will** decorate your hard hat. If you lack imagination, put on your year and course, if you really expect to graduate (Note to Eng Sci types: forget it). Electrical tape (in several colours) is easy to use, but you can stick on anything that will stay. Popular initials are SPS, BFC, LGMB, APSC, SHIT, SKULE, MOM, SEX, HORNY, etc. Glue on beer labels and/or caps or anything else you've swallowed, or a nurse, or raccoon tails (with or without raccoon), headlights, propellors, horns, nuclear warheads, or the SAC dome. Epoxy works well, depending on what you want it to stick to.

During the year, your hard hat will become not only your protector and guardian, but also your best friend and companion. If you can't take your hard hat, take a dog — and if you can't take a dog, take a nurse.

No true Engineer would reveal the naked exterior of his hat in public, and no F!rosh would dare to, unless he was **really** dumb. Don't forget the hard hat decorating contest at the F!rosh dance



Treat your hard hat with kindness and love, and it will return your affection.

18. Negate each of the following statements.

(1) If the teacher is absent, then some students do not complete their homework.

(2) All the students completed their homework and the teacher is present.

(3) Some of the students did not complete their homework or the teacher is absent.

19. Find a counter-example for each statement. $\{1, 5, 7, 9\}$ is the univ

(1) $\forall x,\ x + 3 \geq$

(2) $\forall x,\ x$ is od

Supplementary Problems

51. Let L be the set of lines in the Euclid to y". State whether or not R is (Assume a line is parallel to itself.)

52. Let L be the set of lines in the perpendicular to y". State wheth (4) transitive.

53. Let $\mathcal{A}$ be a family of sets and whether or not R is (1) reflexi

54. What type of relation is R if

INVERSE OF A FUNCTION

68. Let $f : R^{\#} \to R^{\#}$ be defined (5) $f^{-1}([10, 26])$, (6) $f^{-1}([0,$

69. Let $g : R^{\#} \to R^{\#}$ be define

70. Let $f : A \to B$. Find f^{-1}

MISCELLANEOUS PROBL

71. Let $f : R^{\#} \to R^{\#}$ be d defines f^{-1}.

72. Let $A = R^{\#} - \{-1/$

Then f is one-one

73. Let $W = [0, \infty)$.

Which of these

74. Let the functi

(a) $f(3)$

(b) $f(-3) -$ (2)

75. Let $f : A \to B$, $g : B \to A$, and let $g \circ$ function on A. State whet following is true or false.

(1) $g = f^{-1}$ (2) f is a one-one function (5) g is a

(3) $f^{-1}(10$

(3) $g^{-1}(2)$,

nd onto. Give

fined by

$h : W \to W$ be defin

$= x + 2$

Find

$h) - f(x)$ (i) $f^{-1}(10)$

) (j) $f^{-1}(4)$

joint f

sitive.

(3)

de

by

First Year Council

First Year is so much fun that some people come back to do it a second time. The **First Year Committee** is the group who sees to the full distribution of such fun. Early in September, each F!rosh teaching group will elect one of their classmates to represent them on the Engineering Society Council. Representatives will be chosen to sit on Faculty Council in a similar manner. These are the dedicated and tireless new Skulemen who comprise the First Year Committee. They elect from their number one supreme leader, the First Year Chairman, who is privileged as a member of the Executive Committee of the society. It is the duty of this group, under the leadership of its Chairman, to inform the plebian hordes of up-cumming Society events, to instill a healthy amount of Skule spirit, as well to plan and execute numerous Engineering events intended to introduce F!rosh to Skule life. F!rosh traditionally have been involved deeply in the Chariot Race, several pubs each year, the Slave Auction, Oktoberfest, the Cannonball's Intercourse Competition, and sports, not to mention BFC Capers. So we won't. Aside from these more traditional events, each year the Committee tends to try to leave its own lasting impression on the traditions of the Society. For instance, thus year major inroads were made in the developmemt of better control methods for the F!rosh pub. It was found that the original issue of steel clubs with spikes to quell the over zealous resulted in some amount of overkill, and marshalls were reissued with rubber clubs instead. Not only did the F!rosh mortality rate sharply decline, but attendance at pubs increased by one.

ACROSS CANADA

BEER AT ITS BEST

Places to Feed

Oh dear... It's that time of day when hunger hits and the pocket book shies itself into a **very** small corner of your pocket. Or into the position where you must learn ... ELM

HOW TO COMMIT A DULL TREE

Where, might you ask, is a good (relatively) place to find something to absorb the juice which is leaking into your stomach and causing that overwhelming desire to feed? Well, here, for the staunch of paunch, are some of the local feeding places, and a brief indication of what is **unique** about them.

Slightly south of our Engineering buildings is a strip of greasy spoons (a favourite at the **Elm**), starring **Grads**, the **Elm**, and **Students**. These places are fine if you're semi-suicidal or not too bright, or merely desperate, since from experience we have found that it is not humanly possible to tame any meat-like object thrown at you. Thus, for engineers these places come highly recommended.

Of the three, the **Elm** is usually the least deadly, especially in small doses. The fish and chips are the best choice for the squeamish, since they're **supposed** to be greasy.

For the more normal folk there are other "food" distributing outlets surrounding the campus, including:

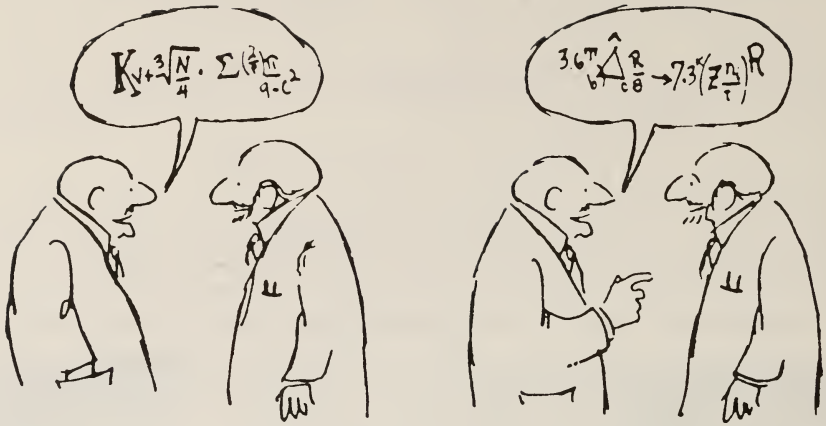
Harvey's — less greasy (slightly)
Mr. Submarine — forms a lump of hardness 9
Swiss Chalet — How can they do that to a poor defenceless chicken?
Pizza Patio — dry but not a bummer

Frank Vetere's — a bummer
Mama Giovani's — a disco bummer
Macdonald's — what need we say?
Park Plaza (Murry's) — decent (relativley)
Toby's — a yummy variety of burgers
Med Sci cafeteria — a cafeteria
Innis — Innisy eats
Grad Students' Union — edible, sometimes
New College — NO NO NO nooooo ooooooooo
Hart House Great Hall — actually the best on campus (shudder)
Huron Groceteria — eat quickly
Fran's Basement — all you can eat spaghetti and more than you want to, but cheap wine.

Fran's — decent, unless you like food (go back to the basement)
Ali Baba — some like it hot, and here's where they belong
Mother's — reasonable subs, sweet or hot
Peking — you know those rumours your hear about Chinese food? ...
Tel Aviv — fallafels that stay with you
Yung Lok — quite good food at reasonable prices
the place just south of Yung Lok — even better, sometimes
United Dairies — Kosher food (no real meat) with no antidote required
Switzer's — another quasi-kosher restaurant, this time with meat and catering
Shopsy's — more of the same
LCBO — The Engineers' food store... your best bet

....and there's more out there lurking off campus waiting for **you** to wander inside. Better lay in a heavy stock of seltzer, or better yet, learn to fast.

And if you plan to spend a lot of late nights away from home, may your soul rest in peace.



Eng Sci Entrance Exam

Instructions

Read each question carefully. Answer all questions. Time limit: 4 hours. Begin immediately.

History

Describe the history of the papacy from its origin to the present day, concentrating especially, but not exclusively, on its social, political, economic, religious, and philosophical impact on Europe, Asia, America, and Africa. Be brief, concise, and specific.

Medicine

You have been provided with a razor blade, a piece of gauze, and a bottle of Scotch. Remove your appendix. Do not suture until your work has been inspected. You have fifteen minutes.

Public Speaking

Twenty-five hundred riot-crazed aborigines are storming the classroom. Calm them. You may use any ancient language except Latin or Greek.

Biology

Create life. Estimate the differences in subsequent human culture if this form of life had developed fifty million years earlier, with special attention to its probable effect on the English Parliamentary system. Prove your thesis.

Music

Write a piano concerto. Orchestrate and perform it with flute and drum. You will find a piano under your seat.

Psychology

Based on the knowledge of their works, evaluate the emotional stability, degree of adjustment, and repressed frustrations of each of the following. Alexander of Aphrodites, Ramses II, Gregory of Nicia, Hammurabi. Support your evaluation with quotations from each man's work, making appropriate references. It is not necessary to translate.

Sociology

Estimate the sociological problems which might accompany the end of the world. Construct an experiment to test your theory.

Engineering

The disassembled parts of a high-powered rifle have been placed on your desk. You will also find an instruction manual printed in Swahili. In ten minutes a hungry Bengal tiger will be admitted to the room. Take whatever action you feel appropriate. Be prepared to justify your decision.

Economics

Develop a realistic plan for refinancing the national debt. Trace the possible effects of your plan in the following areas: Cubism, the Donatist controversy, the wave theory of light. Outline a method for preventing these effects. Criticize this method from all possible points of view, Point out the deficiencies in your point of view, as demonstrated in your answer to the last question.

Political Science

There is a red telephone on the desk beside you. Start World War Three. Report at length on its socio-political effects, if any.

Epistemology

Take a position for or against truth. Prove the validity of your position.

Physics

Explain the nature of matter. Include in your answer an evaluation of the impact of the development of mathematics on science.

Philosophy

Sketch the development of human thought and estimate its significance. Compare with the development of any other kind of thought.

Astronomy

Define the universe. Give three examples.

General Knowledge

Describe in detail. Be objective and specific.

Murphy's Laws

Murphy's Law: If anything can go wrong, it will.

Corollary: Whenever it seems that nothing worse can possibly happen, it will.

Theorems

1) Nothing is ever as simple as it seems.

2) Everything always costs more than you can afford.

3) If you fool around with something long enough, it will eventually break.

4) If you try to please everybody, someone isn't going to like it.

5) If you explain something so clearly that no one could possibly misunderstand, someone will.

6) It is easier to get into something than it is to get out of it.

7) Whatever you want to do, you always have to do something else first.

8) Left to themselves, things will always go from bad to worse.

9) Nature always sides with the hidden flaw.

10) Mother Nature is a bitch.

11) If everything seems to be going well, you've overlooked som[illegible]ing.

1. **Murphy's Law** — if anything can go wrong, it will.
2. **Patrick's Theorem** — If the experiment works, you must be using the wrong equipment.
3. **Skinner's Constant** — That quantity which, when multiplied times, divided by, added to, or extracted from the answer you got ... gives you the answer; also known as Finnegan's Finagling Factor.
4. **Homer's Five-Thumb Postulate** — Experience varies directly with equipment ruined.
5. **Flaflе's Law of the Perversity of Inanimate Objects** — Any inamimate object, regardless of its composition or configuration, may be expected to perform at any time in a totally unexpected manner for reasons that are either entirely obscure or else completely mysterious.
6. **Allen's Axiom** — When all else fails, read the instructions.
7. **The Spare Parts Principle** — The accessibility, during recovery, of small parts which fall from the work bench, varies directly with the size of the part ... and inversely with its importance to the completion of the work underway.
8. **The Compensation Corollary** — The experiment may be considered a success if no more than 50 of the observed measurements must be discarded to obtain a correspondence with theory.
9. **Gumperson's Law** — The probability of a given event occuring is inversely proportional to its desirability.
10. **Ordering Principle** — Those supplies necessary for yesterday's [illegible] ordered no laterthan tomorrow noon.

[illegible] definition, when you are investigating the [illegible] failure — it

CAMPUS COPS

by B. F. Cuius

Sooner or later, you will find yourself face to face with one of Trawna's finest **campus cops** — a Mickey Mouse. The Mouse mentality is actually quite simple to understand, and if you think about it, that's hardly surprising. There are a number of basic tricks to know when dealing with them:

1) They don't want to know. The typical Mouse is terrified that something embarrasing might happen during his shift. If he can look the other way, or better still walk the other way, he will. Give him the chance. **A cornered Mouse can be dangerous.**

2) Act innocent. Smile and say hi — this often scares them away.

3) Give him your name. They are supposed to check your student card, but usually they just settle for a name. "Joe Skule" is one of their favorites. Don't worry about legal hassles. They file the names in the darkest depths of the Administration, never to be seen again. Or else use some dumb artsie's student card.

4) Tell them what you've done. The fastest way to get rid of unwanted Mice is to tell them that you've blown up Simcoe Hall, or dismantled Front Campus, or something equally imaginative. Then they won't **let** you tell them what you've been doing. They're in too much of a hurry to vanish.

5) As a last resort, give them a beer. All mice love beer. If you can't get rid of one and you need him to be friendly, you'll have to give him a drink. But Mice find beer hopelessly addicting. You may make them friendly, but they'll never leave —

6)Be nice. The Mice can't help being Mice, they need the job. They can get really nasty at times, and remember — the Metros **do** have full authority on Campus — all the Mice have to do is call them. But then

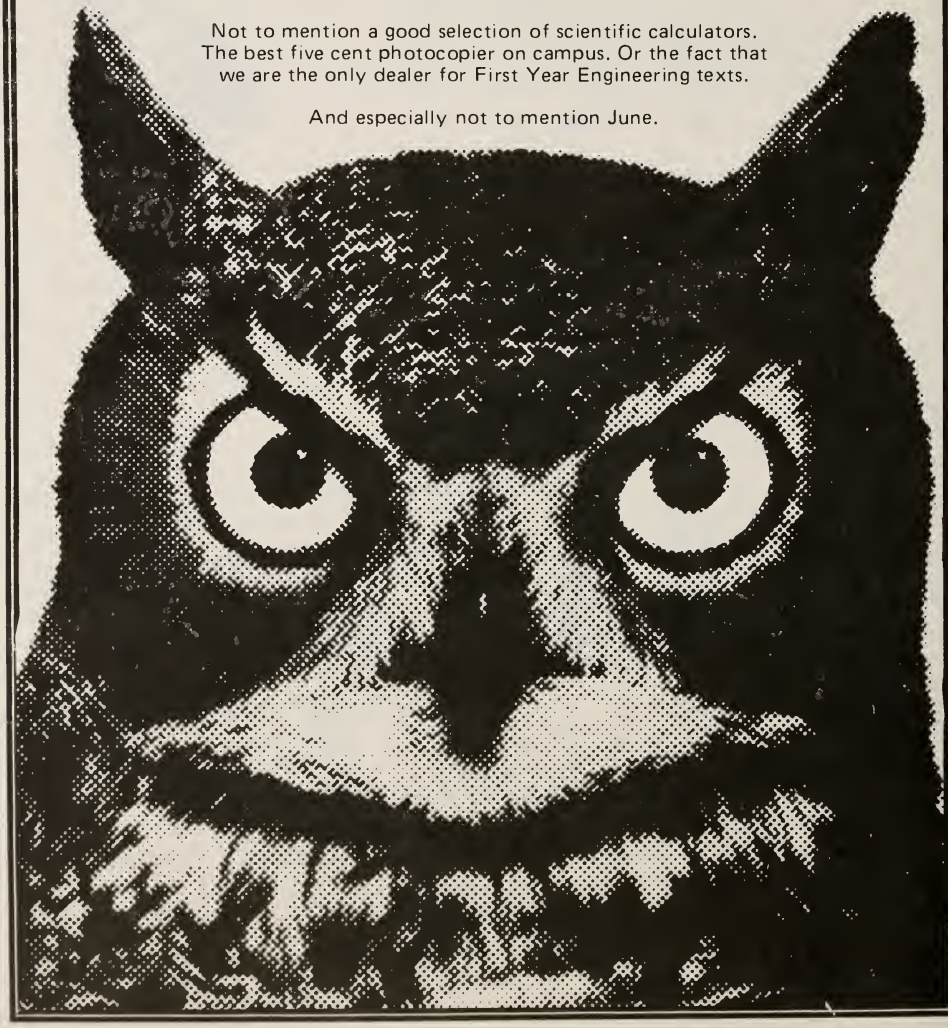
WISEN UP!

Where do you get all your Skule supplies? If you didn't answer the ENGINEERING STORES, you should be at Ryerson! The Engineering Society runs the Stores to give you what you need at the lowest possible prices. We're upstairs at the Annex.

Note books — Exam reprints — Binders — Drafting supplies — Schaum's Notes — Pens — Pencils — Paper — Eng Soc decals — BFC buttons Skule jewelry — LGMB records — Booze and sex (sometimes)

Not to mention a good selection of scientific calculators. The best five cent photocopier on campus. Or the fact that we are the only dealer for First Year Engineering texts.

And especially not to mention June.



SHINERAMA

a) Have you ever shined shoes?
b) Have you ever worn shoes?
c) Do you know what shoes are?

Even if you answered "No" to all of the above, you are still eligible to be a part of Shinerama. Shinerama is a nationwide campaign to raise money for Cystic Fibrosis, a serious children's disease affecting the mucous glands. All across Canada, university students buff down on the streets of their cities, shining shoes, making friends, collecting money, and having a lot of fun on their 'Shining Day'.

So everyone, (especially Frosh) start shining your hard hat and get ready for a great time helping Shinerama "Give a Child the Breath of Life."

Keep on Shinin'
Shinerama
Coordinator

FOR WOMEN ONLY

The Women's Committee is that select few which organizes social events (real good drunks) for the most elite group on campus, the woman engineering student. (Men may now move on to the next page)

All women in engineering are invited to participate in our two annual parties, and, given enough interest, more events will be planned.

The Women's committee holds the famous/infamous Wine and Cheese Party, (not to be confused with the infamous/famous Men's Tea Party), on beginning October 9th, keep alert in case the date changes. It's a great chance to meet upperclasswomen and the women profs.

Our next annual event is the Women in Engineering Dinner. We had a great turnout last year with our traditional "you buy the food, we buy the wine" arrangement. If you would like to do more than just come out and enjoy, contact us through the Engin ering Stores, and watch for announcements of committee meetings.

Elaine Campbell
Pat Burchat
Co-Chairpersons

JOIN US

"Gee, you mean to say that just anyone can join the rabble?"

The Social Committee is a bunch of people who know how to have a good time, and will help you to have a good time too. As usual, the calender will have the dates of our annual events:

We are holding a Cannonball this year, as always, with the World Renowned, (but not triple-award-winning) Intercourse Competition (if you don't know what this is, why not come out and see), and the Ms. Cannonball Contest, (Keeping up with the times) for all those who like to dance. We hold a Car Rally in November through the wilds of Orangeville, Newmarket and other assorted 'Styx' for those who like to move fast. We run Engineering pubs for those who prefer to drink and once again, we will be throwing an Oktoberfest for those who like and prefer to drink, move and dance, Fast!

This is a great committee to belong to, you can get into all these great parties free, for only a fraction of your years' 3.15 x 10 seconds. If you don't join the committee, then come to the events and learn about Skule Spirits first hand.

P.S. Don't believe all that guff they tell you about having to study 27 hours a week. Part of the educational experience at U. of T. Engineering is **Partying and Carrying On 101S/F, 202Y, etc.**

E. Campbell
Chairperson

the Cannon

GET INVOLVED!! There are women waiting for you in our offices. Our offices are located on the third floor of the Old Metro Library.

LOVE n' KISSES
Dana and Sue
CANNON staff

The CANNON is a journal of the University of Toronto Engineering Society published to announce Engineering Society events, discuss Faculty and educational matters, and to be an open forum for the opinions and interests of all engineering students and professors. The CANNON will be featuring interviews with professors, articles written by students (that's you), and all sorts of new and interesting goodies (exposes, food, trivia, etc.). The CANNON is distributed FREE in all Engineering buildings on most Tuesdays. You'll have a great time and learn something as well. We want photographers, typists, writers, reporters, and just plain folk to hang around. So

T*iKE *iKE

After two weeks or so, the average F!rosh will realize that the university is a massive institution with a huge amount of emotional inertia. How then, does one leave his/her mark??

The Toike Oike (pronounced toy- key oyk or Toike Oike) is U of T Engineering's alternative organ. It provides a break from the usual humdrum of other university rags (The Varsity, The Cannon, etc.). It has drawn praise from such notable notables as Toronto Star columnist Michelle Landsberg, previous engineering deans, women's groups and more.

What is the Toike?

The Toike is Eng Soc's answer to The National Lampoon and TV Guide. The Toike is dedicated to preserving the inherent insantiy of university life. Working for the Toike provides an opportunity to meeet lots weird and wonderful people. You can use the Toike to air your pet gripe, or just cut down SAC and artsies like the rest of us.

Whatever your interests, photography, writing, sodomy or anything else remotely useful, you can find a place on the Toike.

Come (/cum?!) to a make up and join the fun. The first make up is September 8, the day of the Scavenger Hunt.

CUM UND BE A BNAD

The band doesn't discriminate against types of music, or instruments, except that, if you can't carry it, it will probably be hard to take to most events. No one's managed a piano yet, but last year we had an electric bass guitar for a while.

Musical expertise is not mandatory, but a working knowledge of any instrument will increase your enjoyment of the Bnad's activities. If you can't play anything though, we can find you something to do.

If you're worried about taking a valuable instrument into a crowded football stadium, or are without an instrument, the band will subsidize the renting of an instrument.

Now you have no excuse for not joining the Band. You know it exists, and you know you are welcome, so drop up to the bandroom and get your name on the list on the door.

If you come at the right time, who knows, you may be able to join a band-leader in a cold beer, for the first of many times during the year, if you keep showing up. To avoid inconvenience to those attempting to get to the Engineering Stores please form the line-up for Band membership down the stairs from Room 341 in the Metro Library and stay close to the wall.

See you soon.

YOUR!! SUMMER EMPLOY

A large number of good summer jobs are available to Engineering Students.

However, no one is going to come looking for you. Apply to the companies and sell yourself.

To help you get started the University has a job Placement Centre. The Placement Centre is located on the north west corner of Bloor and Spadina. At the Placement Centre you will find the names of the companies looking for summer help and get background information about the companies.

Summer job listings can also be found at the Engineering Society.

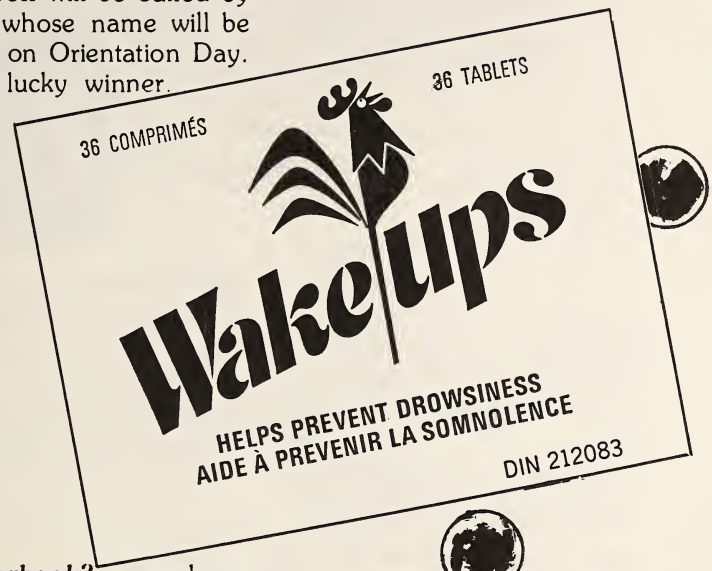
Companies start posting jobs at the Placement Centre in Sept. and continue throughout the year.

Start going up the Placement Centre in September and get acquainted with procedures for on campus recruitment, it will increase your chances of getting a good summer job.

Gary Jones
Employment Committee 7T9

YEARBOOK EDITOR

This year it has been decided that the **Engineering Yearbook** will be edited by one of the F!rosh, whose name will be drawn out of a hat on Orientation Day. **You** might be the lucky winner.



Wot is the Yearbook? you ask; you inquisitive innocent one who is being engulfed by the manifestations of megalomaniacal desires to attain higher levels of awareness; (i.e. one who is going to U of T). Well...

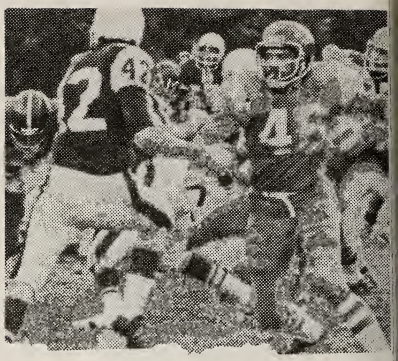
In and about the months of November, January and February, determined and eager engineers gather round in the haunts (or an appropriate substitute) with nothing to do but eat and drink beer, and a patient observer would find that a yearbook is in the process of compilation.

The yearbook incorporates a select few photos from countless sub-missions from you budding photographers (those interested in asexual photocopy) who spectate the environment around engineering events. It also contains the rows of graduate photos artistically laid out and aligned onto the yearbook tableaux. These photos are preceded by the exciting and invigorating 'Clubs' section where the year's exploits of each department are displayed four awl too sea. This is where your photographication is needed.

The rest of the book is a smattering of real neat stuff like the Chariot Races, Cannonball (our Winter bash-cum- dance- cum- semi- formal) and events from around the Eng. Joc. sports world.

Besides these ripples in the Society's lifestream, or in spite of them, a yearbook gets published.

OUR ATHLETICS



The Engineering Faculty has a body, the **Engineering Athletic Association**, which organizes sport activities for the faculty. Engineers are represented in the university intramural leagues in these sports: swimming, water polo, basketball, football (tackle & touch), hockey, lacrosse, rugby, soccer, squash, track & field and volleyball.

These sports are played at different levels of skill so there is no need for someone to think he or she is 'too good' or 'too lousy' for an engineering team.

In addition to the faculty teams, there will also be intramural tournaments in these sports. You'll be able to form your own teams from within the faculty and play against other engineers.

If there is enough interest in other sports, eg., table tennis, skiing, etc., we can organize other tournaments. To get these started, come by the **Engineering Athletic Office**

The women in Engineering have gained quite a reputation in recent years as tough competitors in interfaculty sports. You too can have the chance to be a member of one or more of our legendary teams.

Engineering women enter competition teams in basketball, track and field, hockey, and volleyball. There are competition possibilities in broomball, badminton, indoor miniature golf, innertube waterpolo, tennis, table tennis and touch football. For team lists and exact dates, see the bulletin boards in the second floor of the Annex and the ladies' lounge on the second floor of the Galbraith building.

If you don't go in for team sports, the Benson building is the site of competitive sport and sport clubs for women. Female frosh are encouraged to check out the excellent facilities and programs.

HART HOUSE

Your cultural and recreational centre welcomes you for 79-80. Remember, the House has everything- concerts, pubs, clubs, activities, the best food on campus, and, this year, the whole North Wing for free-time Recreational Athletics.

REMEMBER:
You've Gotta Have Hart!!

CALCULATORS UNLIMITED!

LARGEST SELECTION IN TOWN – MORE THAN 100 MODELS IN STOCK

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10% REDUCTION*

To qualify present this ad and your student card.

*On calculators not on sale — 5% reduction on calculators already reduced from their reg. price. Some items not included in this offer.

KEEP THIS VALUABLE COUPON

ENGINEERING HYMN

CHORUS: (To be sung after every verse)
We are, we are, we are, we are, we are the Engineers,
We can, we can, we can, we can demolish forty beers,
Drink rum, drink rum, drink rum, drink rum and come along with us,
For we don't give a damn for any damn man who don't give a damn for us!

Godiva was a lady who through Coventry did ride,
To show to all the villagers her fine and lily-white hide.
The most observent villager, an Engineer of course,
Was the only one to notice that Godiva rode a horse.

Said she, "I've come a long, long way and I will go as far,
With the man who takes me from this horse and leads me to a bar."
The men who took her from her steed and stood her to a beer
Were a blurry-eyed surveyor and a drunken Engineer.

Godiva was a lady well-endowed there was no doubt,
She never wore a stitch of clothes, just wound her hair about,
The first man ever made her was an Engineer of course,
But on just one beer an artsie queer once made Godiva's horse.

My father was a miner from the Northern Malamute,
My mother was a mistress in a house of ill repute,
They kicked me out at tender age and never shed a tear,
"Get out of here, you son of a bitch, and join the Engineers!"

An artsman and an Engineer once found a gallon can,
Said the artsman, "Match me drink for drink, let's see if you're a man."
They drank three drinks, the artsman fell, his face was turning green.
But the Engineer drank on and said, "It's only gasoline!"

I happened once upon a girl whose eyes were full of fire,
Her physical endowments would have made your hands perspire,
To my surprise she told me that she never had been kissed;
Her boyfriend was a tired Engineering Scientist.

Sir Francis Drake and all his men set out for Calais Bay

more Hymn about her...

Caesar went to Egypt at the age of fifty-three,
But Cleopatra's blood was red, her heart was warm and free,
And every night when Caesar said good-night at one-o'clock,
A Roman Engineer was waiting just around the block.

Venus is a statue made entirely out of stone,
There's not a fig leaf on her, she's as naked as a bone.
On noticing her arms were gone, an Engineer discoursed,
"The damn thing's busted concrete and it should be reinforced."

A maiden and an Engineer were sitting in the park,
The Engineer was busy doing research after dark,
His scientific method was a marvel to observe,
While his right hand wrote the figures down, his left hand traced the curves.

My father peddles opium, my mother's on the dole,
My sister used to walk the streets, but now she's on parole,
My brother runs a restaurant with bedrooms in the rear,
But they don't even speak to me, 'cause I'm an Engineer.

Joe E. Skule's 100 but he has a heart of gold.
He gave the Meds his Skule-house when it was 94 years old.
The meds were very grateful, but they have problems with precision,
For they use those T-squares and dividers for making their incisions.

On reading Kama Sutra, a guy learned position nine,
For proving masculinity, it truly was divine.
But then one day the girl rebelled and threw him on his rear,
For he was a feeble artsie and she was an Engineer.

The army and the navy men were out to have some fun,
Looking for a tavern where the fiery liquors run.
All they found were empties, for the Engineers had come
And traded all their instruments for gallon jugs of rum.

An Engineer once came to class so drunk and very late,
He stumbled through the lecture hall at an ever diminishing rate.
The only thing that held him up and kept him on his course
Was the boundary condition and the electromotive force.

Now you've heard our story and you know we're Engineers,
We love to love our women, and we love to drink our beers

The History of the LGMB

Robert Ketchen (Mech 7T8)

During the Second World War there was a munitions plant at Ajax; in fact the plant pretty well **was** Ajax. Afterwar ended, the University of Toronto used the shell-filling plant for a few years for teaching engineering, to ease the sudden post-war increase in enrollment, and the barracks served as residences for engineering students. In the fall of 1948, Engineering returned to the St. George campus and probably sometime during the '48 — '49 Skule year the now world-famous Lady Godiva Memorial Band came into existence.

A.J.Paul LaPrairie (Mining Eng. 5T0) served six years overseas with the Irish Regiment of Canada, and on spending two years taking classes at Ajax among many other veterans, felt a "regimental" band was in order. Being the Direktor of Kultural Aktivities (an executive position in the Engineering Society — the present day equivalent in terms of function would seem to be a cross between Blue and Gold Chairman

and BFC Chief) he undertook the founding of the Band. Through his contacts in the Irish Regiment he acquired the necessary accoutrements of any self-respecting world-famous band: scrounging Fort York and University Avenue Armouries and the Sally Ann at Church and King Streets turned up a collection of Irish Regiments tunics, some pith helmets, six dragoon's brass helmets, a drummer's leopard skin, two tenor snare druns, and most important, a bass drum with one head (the open side was used to stockpile beer while "on parade" — a modification which might well be worth considering for the present, in my estimation).

The actual date when the Band started is somewhat vague due to conflicting sources of information, but it would seem to have been sometime during the calendar year 1949; which Skule year, '48—'49 or '49—'50, is at present still uncertain — '49—'50 seems to be more likely since they are first pictured in the 5T0 Yearbook, although A.J.Paul LaPrairie says it was the fall of 1948. In any event, the first rehearsal fielded about a dozen people from all years consisting of trumpets, trombones, saxaphones, clarinets, one flute, two snare drums, and the bass drum (sounds disarmingly familiar) — a "motley" group at best. During the second practise it was discovered that LaPrairie could not read music , and he was demoted (or promoted perhaps) to bass drummer, and Tom Kenny became "Captain" for the '49—'50 Skule year.

The name of the Band was devised at a group think session. Ideas were batted around and Lady Godiva Band was agreed upon. Bill Walker (later President of the Engineering Society) suggested the

'Memorial' part, and so it was. The Band was even recognized in a letter from the Lord-Mayor of Coventry. Other early and original members of the Band were Leon La Prairie (Mining Geology 5T1) (this was Paul's brother — one father, six sons, and one daughter graduated from Mining Engineering and Mining Geology at U of T), Glen Weaver (Civil 5T2), Earl Scott (Mech 5T4), Don Urquart (Elec. 5T4), Bill Elliot (Mech 5T5), Jim Montgomery, and Dick Walker.

Leon La Prairie led the band in '50—'51 and Earl Scott led in '51—'52 and '52—'53. During Earl Scott's leadership, the Irish egipment tunics and pith hemnets were running out so old, gaudy clothes were taken to — a help since fights and dirty capers were frequent. Early capers and events were similar to those today: the Band performed in Skule Nites ('51—'52); raucous marches through U.C. and the Meds buildings during lectures ere not unusual (not infrequent, at least); football games were a highlight where the LGMB competed aurally with the now defunct Blue and White marching band (the Blue and White's demise, incidentally, leaves the LGMB as the only band on campus which performs in any sort of official capacity — oh my!); the main bill of

Bob Bossin (now leader of Stringband) was leader during the '66—'67 Skule year. Being enrolled in the faculty of Music, Bossin was able to pad the Band with many ringers, although we don't view them as such now; the LGMB is much more the U of T's band now and membership is open to anyone. The third record was Made by Bob (a quasi-centennial project) and it included another prize-winning performance recorded live at the 1967 Kiwanis Music Festival.

John Pullam Led the Band during '67—'68, and the big highlight that year was a trip to EXPO 67 — they were even invited to be there. Is nothing sacred? The Band also made a movie that year (strictly Super—8).

More recently, Jim Burpee (Mech 7T8) led the Band in '74—'75 and again in '75—'76 along with John Loach (Mech 7T7). Jim revived the Band from a slump in popularity which bottomed in 1973 — particularly odd, since '73 was the Centennial year for Engineering at the University of Toronto. The Band's popularity boomed again and

fare for the Band was performing noisy fanfares and such for events such as the Chariot Race, the Slave Auction (rather unlike the Slave Auctions we are graced with nowadays), and when the Mighty Skule Cannon made an appearance anywhere.

Details of the Band's existence for the next decade or so are at present somewhat nebulous. After that period Don Monro was leader from '61—'62 to '65—'66 with Frank Dixon fronting for him in '63—'64 while he was President of the Engineering Society. The LGMB's first two LP records wree produced by Don. The first was recorded live on November 30th, 1962, at the mighty Cannonball; it had to be re-recorded. however, when the tape machine broke. It was a financial success but otherwise a disaster. The second record was made in 1964 and was a musical success and a financial disaster. Fortunately the LGMBash was devised by Don and it made a fortune. The LGMBash has unfortunately fallen by the wayside, as have many similar events at the U of T. In 1965 the Band took first place for brass and reed bands in the Kiwanis Music Festival (played in Massey Hall!). Don says the Band was in trouble **all** the time with everybody. His last caper made headlines when the LGMB attended the opening of the Bloor-Danforth line of the Toronto Subway (I should point out here that it is a well established fact that no event in Toronto is official without the LGMB in attendance). Unfortunatel;y the opening turned into a closing and the Engineering Society was fined several thousand dollars as a result. Being an easily identified group, the LGMB was liberally blamed, even though they had nothing really to do with the electrical shutdown of the system. The most they did was enter the system without paying, but after all — why should the official band for an occasion have to pay to participate? It is only recently that the Band has been allowed to ride on the subway — the TTC officials even let us include subway concerts as part of our annual season concert programme now.

in 1976 the LGMB produced yet another prize-winning performance at the Kiwanis Music Festival with a band assembled for the occasion by John Loach (with a liberal sprinkling of John's friends in the Faculty of Music).

The Skule year '76—'77 saw Rob Yates (Elec 7T9) and myself lead the Band through many memorable events, including the opening of the CN Tower, the opening of the Toronto Eaton Centre, and most important, the production of the fourth LP record. This record will be out in September 1977 and will be available at the Engineering Stores on the second floor of the Engineering Annex (plug, plug!).

It should be rather obvious to the reader by now that there are huge gaps in this chronology. I have not omitted material; I simply do not have any more yet. For some inexplicable reason, getting old LGMBeers to talk about their days with the Band is like getting blood from a stone (or intelligence from an Artsman). If prodded enough though, they do give in.

Engineering Society

by Scott Ferguson

To start with, it is worth pointing out that Eng. Soc. is Canada's oldest engineering organization, having been formed in 1885, one year before the E.I.C. started up. Its first president was the then Dean of Engineering, John Galbraith (named after the famous engineering building) who held the office for three years. After him the students took the job and the first undergraduate president was H. E. T. Haultain (also named after a famous building).

Originally Eng. Soc. was what is referred to as a "learned" society which had goals such as the encouragement of original research in engineering, the preservation of the results of the research, the dissemination of the results to its members, the cultivation of a spirit of mutual assistance and co-operation among its members in preparation for and in practice of the profession of engineering and to provide an official means of communication between the student body and the Faculty Council, the University authorities, and other student bodies. The latter two objectives weren't really dominant until after World War I

There used to be regular meetings of students, graduates, staff members, and invited visitors at which technical papers were presented for discussion. In 1885 these papers were published in a pamphlet form called *Papers Read before the Engineering Society of S.P.S.* These and others became the start of the Engineering Society Library from which the Engineering Stores were to be born. Later these papers were renamed *The Transactions of the Engineering Society*.

By November, 1907, the name was *Applied Science*, and it was a full technical journal. By then the Society had grown from its original 35 members to 721. This journal ended in 1916, but the *Transactions of the Engineering Society* reappeared in 1920-21 along with the *Transcations and Yearbook of the Engineering Society*, which included a section on student activities.

These early beginnings fostered an atmosphere of co-operation between the staff and students of engineering. As early as the 1890's, through negotiation with the staff, the Eng. Soc. had permission to use regular class time to attend technical meetings of the Society, and to have marks assigned to papers presented there by students, and to have these marks considered in the determination of honour standing.

In 1888-89 the Engineering Stores (then called the Supply Department) began as a small room to house

books, papers, and property of the Society. By 1891-92, it was selling drawing paper to students, and by 1908 it had a permanent secretary to buy and sell goods. Eventually it separated from the library and moved to room 19 of the SPS Building (the *"Little Red Skulehouse"*). Today it is in the Engineering Annex and under student management, with a permanent sales staff (i.e., June).

In the late 1870's the Skule Yell began:

Toike Oike, Toike Oike
Ollum Te Chollum Te Chay
School of Science,
School of Science,
Hurray, Hurray, Hurray!

On November 25, 1905, the rest of this familiar yell came into being:

We are, we are, we are, we are,
we are the Engineers...

The Course Clubs as they now exist had gradual beginnings as the Society grew. Originally the course members would form debating clubs which eventually led to course clubs. The Eng. Soc. once sponsored a debating club which had intra-university and intra-year debates. Its members often joined the university debating teams and the clubs even used to offer the Eng. Soc. Cup for Skule's best speaker.

For a long time the Eng. Soc. has represented the student body's academic interests. It criticized the curriculum and staff long before students throughout the university became concerned with parity in governing the university. The Society's actions have been quiet but effective, as can be witnessed by the current representation of students on the Faculty Council.

The Eng. Soc. as you can now see has grown from a social sort of club to an active instrument of student government and representation, maintaining the strong links between

the staff, students, and graduates of Skule.

The old Skule Days Were full of rivalry and capers. The freshmen used to have to wear distinctively coloured ties; Skulemen wore green, UC had white with red dots, and Theology wore black. Bags of "tie scalp" were coveted possessions on all sides of these rivalries.

Capers were taken much more lightly in those days, as can be found in records of water floods at UC, cows in the draughting rooms (from the Medsies), Cannon thefts, and so on.

Music has long been in the hearts of engineers. In 1901 there were student singing and instrumental groups. The *Toike-Oikestra*, Formed in 1911, died at the first World War, and rose again in 1919. The *LGMB* is a relative newcomer, having been

formed in 1948. Originally it had about a dozen core members but grew as large as 250 at football games. Even the University's president, Sidney Smith, joined the bunch on occasion. The Lord Mayor of Coventry, England extended his formal greeting when he heard of the Band's formation. Today it is still its fun loving and merry-making self, now being the "Triple Prize Winning LGMB".

Skule Nite had its beginnings in 1920 when the Eng. Soc. Executive appointed a committee to develop the growing interest in a Stunt Night. The first annual "*Ngynrs in SPsSms*" was presented in Massey Hall on March 2, 1921 to an audience of 1343 people, with music provided by the Toike Oikestra. Nowadays they take place in Hart House Theatre for three or four day runs. Unfortunately Skule Nite production died in the 1960's, but it was reinstated in 1973 and continues strongly.

The Chariot Races of today began as a part of an indoor festivity celebrating the Eng. Soc. Elections. The winners were awarded the *Gerry P. Potts Trophy* which still exists and is presented , still, to this day. The contestants would balance on thunder pots with ropes on their handles. Today, of course, the chariots are somewhat larger, faster, and the riders more armoured.

So ends a brief summary of the history of Eng. Soc., as recorded in **Cold Iron and Lady Godiva**. You can see that it is a dynamic and ever changing organization which is built up of and for students in engineering. It's **your** society, so use it and support it.

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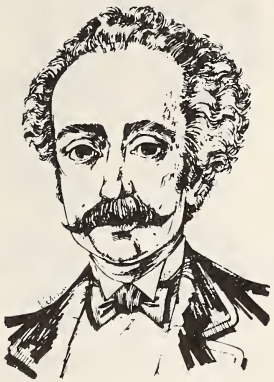
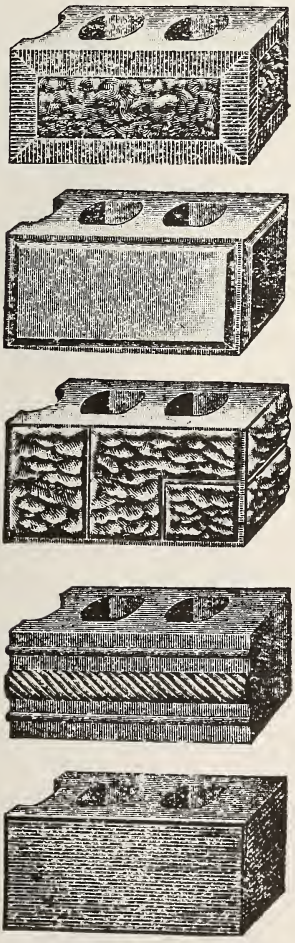
CIVIL CLUBS

Due to unforseen circumstances, i.e. I forgot, this little blurb is being written in true engineering fashion, at the last possible moment. This is not to say however, that this article will not be as good as anything else submitted by the other clubs. After all, being as civils are much superior than the rest; yes, Gary, even chemicals; this piece has to be at least as good, if not better.





For the benefit of the dumb F!rosh a little bit of explanation is in order about what the Civil Club does. The Civil Club does NOTHING. It is the people who participate in the Club activities that do something. Without the support of you, the students, things just don't work.

The Civil Club executive has many activities in the works, more ICE pubs, a trip to "?", a hockey tournament, and of course the infamous Civil dinner, just to mention a few. Although dates were not available at press time, if you check the door of the new Civil Club office (GB 138) I'm sure you'll find what you're looking for. Better still, Drop in for free information, SEX and booze.

I would like to conclude this blurb by wishing you all Good Luck, especially the F!rosh, you'll need it.

Good Luck,
Brian Doherty
Civil Chairman

P.S. I was only kidding about the sex and booze.

GEO

This is the article for **Geological Engindeering and Applied Earth Science**. Please keep editorial work to a minimum and don't cut a single idea.

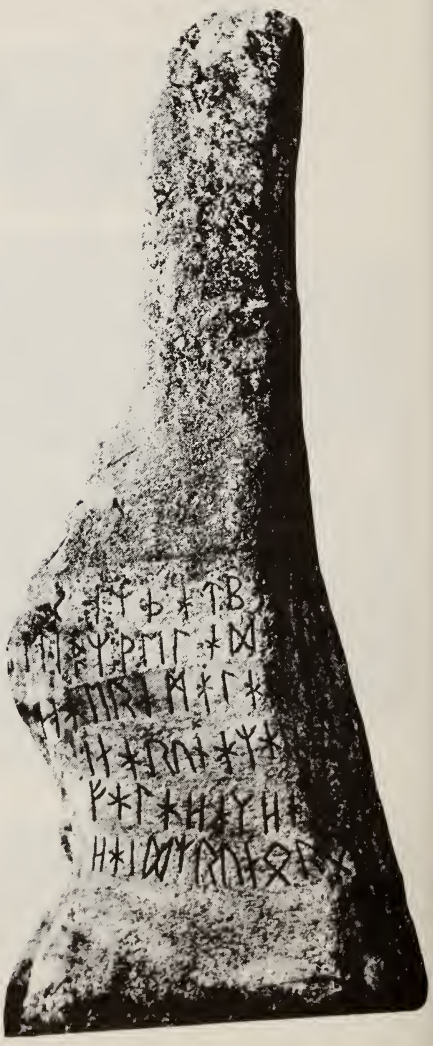
[*OK by me — it's just the way you wrote it. Ed.*]

Welcome to the illustrious department of Geological Engineering and Applied Earth Science (I don't know what the last bit means) where men are taught how where to, when to and why to play with their rocks. The difference between us and others is we get payed for it (eventually).

Now that I have gotten tradition out of the way with a rude comment, lets get serious for a moment. If you love the out doors, nature, rain, wild animals, long hours, black flies, mosquitos and isolation, then option A, Exploration, is for you. On the other hand if you are fascinated by smelters, flotation machines, grinders, crushers, roasters, thickeners, systems, thin sections and semi isolation then option B , Minerals Processing is for you. Finally, not necessarily due to being the least, if you lke subways, foundations, tunnels, pits, dams, highways, and slope stability then your an option C man.

Regardless of which one is your bag, we're all in the same boat called "Rock". We may be small but we have guts and we have spirit.

Again welcome to OUR department and any questions are welcomed by me. Good Luck and hope to see you, whether it be on an outcrop, through a microscope or in a tunnel.



MECHANICAL

Welcome my friends, welcome to the machine which stops at nothing when it comes down to having a good time. Mech Eng has been and shall always be the cream of SKULE. We are the leaders and we shall always triumph over chems, geos, electricals and of course, eng sci.

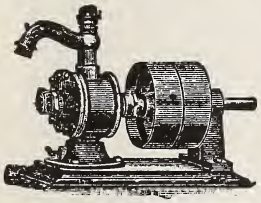
This year promises to be the best socially active year that Mech has ever had. We have numerous events planned such as Nic Nites, a mech dinner, winning the Chariot Race again and parties. These events will be successful only if we all pull together. I urge you to participate in all or as many as possible.

If there is anything I or the club can do for you personally, or for your class please ask.

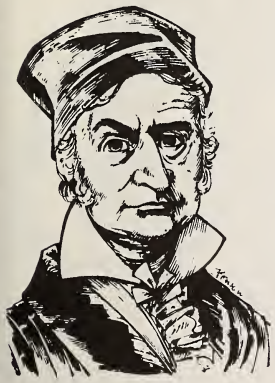
Remember, you are Mech!

A.C. Ciccone

ACME ROTARY POWER



INDUSTRIAL



The industrial club represents the peak of man's ability to organize in groups. But seriously folks ..., industrial engineers are just a bunch of wild and crazy guys. The Industrial Club were the unofficial winners of last year's chariot race. (If Civil is stupid enough to return our chariot we'll beat them again!)

As usual, the Club is planning a lot of fascinating things this year. The inter-year hockey tournament, some speakers from industry, and a couple of smokers complete with those classic European movies. Bet you can hardly wait!

Now for the exciting news. This year marks the beginning of a joint Industrial students' council between the club and the American Institute of Industrial Engineers. John Lepard is president of the student chapter of the AIIE and will lead them onto bigger and better things.

See you in September.

IE Club Chairman

ENGINEERING SCIENCE

All students of Eng Sci are members of the **Engineering Science Club**, which is responsible for social events within the division. The annual event is the Eng Sci dinner, which has excellent food and interesting speakers at a very reasonable and highly subsidized price.

Smokers, which are informal meetings between professors and students with plenty of beer available, are held twice per term. New this year is a wine and cheese (or perhaps several, depending on the popularity), which will be held in November.

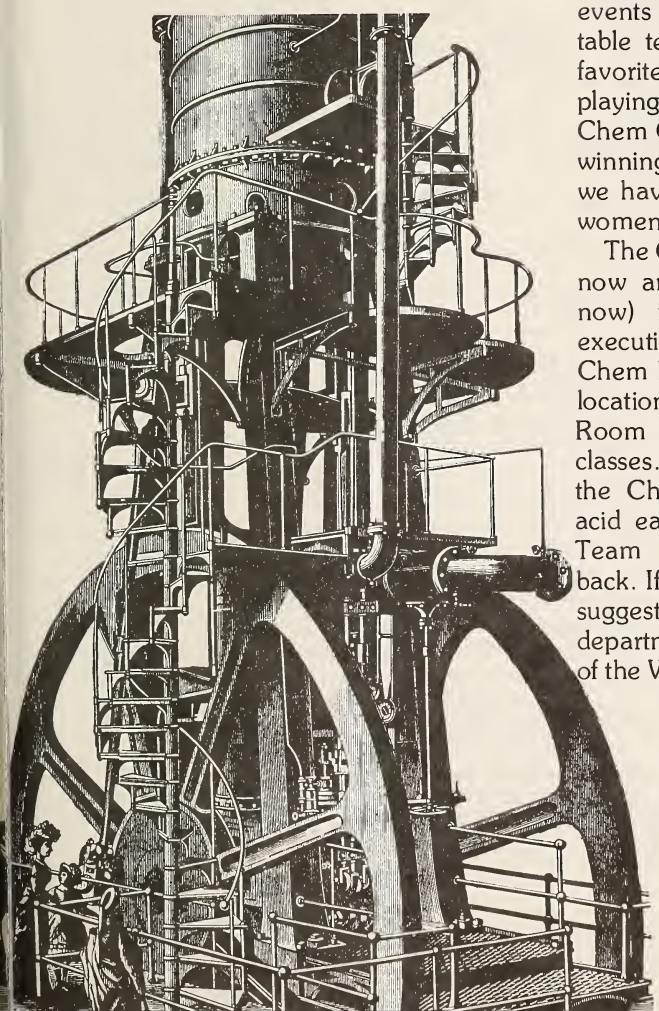
The fire in the Sandford Fleming building destroyed our previous common room, but hopefully by the time you read this (or October at the latest), the new common room will be ready. It will be situated on the ground floor of the old Central Library, directly across the road from the Galbraith Building. This common room is for the use of all Eng Sci students and is the ideal location for eating lunch, *"discussing"* problem sets, or just simply relaxing.

The new Chairman of the Division of Engineering Science is **Dr. F. Hooper**, former star of stage and screen.

CHEMICAL

The Chem Eng club is one of the most successful on campus due to the enthusiastic participation of its members and affiliates. You will be told n! times to become involved with some of the extracurricular activities on campus. Unless you do, you will finish your four years with no more personality than a calculator.

The Club's annual events include several smokers and two semi-formal club dinners. Furthermore, Team Chemical is active in a number of sporting



events such as football, hockey, table tennis, skiing and cards. A favorite pastime of Chems is playing the slot machine in the Chem Common Room in hope of winning a can of pop. (By the way we have the largest proportion of women in the faculty.)

The Club executive meets every now and then (more then than now) in our plush third floor executive offices near the Fiz Chem labs or in more convenient locations such as the Common Room or in the halls between classes. You can easily recognize the Chems by our charred and acid eaten lab coats bearing the Team Chemical symbol on the back. If you have any questions or suggestions, our mail box is in the department office on the 2nd floor of the Wallberg building.

ELECTRICAL

If you have frizzy hair, static cling, rub your feet along carpets and have a shocking personality, then plug yourself in with us. Join Mr. Output and Ms. Input and the rest of the club at the Electrical Weiner roast or see them do their thing at the Cannonball Intercourse Competition. You can do your thing at the Electrical Pubs where people of all races, creed and departments cum together for an evening of booze, broads and ballads.

Now, quick! check your student card! If and only if your department number is lucky 7, you as a member of the Electrical Club are eligible to participate in our mass student versus professor tournaments. There fearless undergraduates face the risk of injury and/or failing marks in hockey and football games. Or if you're interested in just blood and guts, the Chariot Race is for you. Unleash all your animal tendencies and first term frustrations on the Mech, Civil etc. chariots for the glory of the Blue Chariot with the Gold Lightning Bolts.

Most people will be welcome at these events, but if you are enrolled in the Department of Electrical Engineering, then you are instantly a lucky member of this exclusive club and are entitled to attend everything. Keep an eye out for our posters.

METALLURGY

Good Things come in small packages! Never has this been more evident in the case of the Metallurgy Club. The MMS events that occur throughout the year are both great and numerous. Not only are there social events such as the Christmas party, casino night, club dinner and many other social functions, there are, as well, many other events including meetings with CIM, ASM, and other industry people (a great place to make contacts - like those related to summer jobs).

The other disciplines may think of us as an insignificant part of this faculty. This, fortunately, is not the case at all. The Metallurgists are very involved in all aspects of athletics at the University. As a matter of fact, MMS 8T0 won the athletic award for most points accumulated in both intramural and varsity sports. Unofficially, MMS members were seen to 'score' the most points in the pubs around the campus as well.

The annual Metallurgy field trip is an event that simply must not be missed. Last year we went to Sudbury and Elliot Lake, for a tour of the mines and mills. By night, we toured the town and discovered the ups and downs and ins and outs of the Sudbury folk. - A truly up-lifting experience.

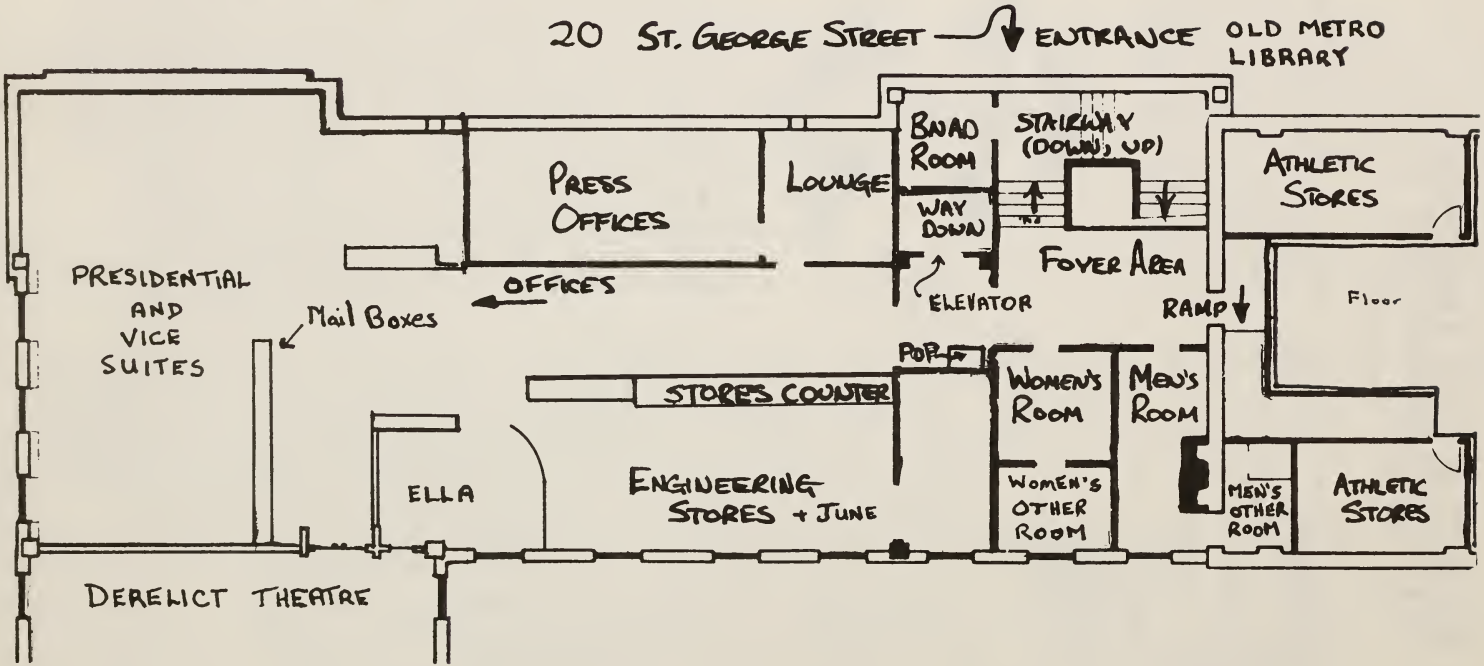
Academically speaking, we in MMS have what may be considered an unfair advantage. In no other course can you rank in the bottom of the class and still put on your resume that you stood in the top 20. But seriously, our prof-student ratio is by far the best in the faculty and this leads to a family atmosphere which is advantageous both socially and

academically. Men and women are increasingly considering the Metallurgy option each year not only because of the fantastic four years of school but the excellent career opportunities that develop, which are reported to be the best of all the Engineering disciplines.

If there are any questions on Metallurgy or you would like to discuss a Metallurgy option as opposed to another discipline, please get in touch with the Club Chairman, Scott Fowler or any other graduating student. We would all like to talk to you - so good luck with your First year studies and don't forget to have fun. We will see you in Metallurgy an interesting and dynamic field.

Respectfully submitted,
Scott Fowler
MMS Club Chairman

How to Find the Engineering Society



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